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United States
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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

REAR ADMIRAL BRIAN SALERNO

ON THE

**M/V COSCO BUSAN AND THE
MARINE CASUALTY INVESTIGATION PROGRAM**

BEFORE THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON COAST GUARD AND MARINE TRANSPORTATION

U. S. HOUSE OF REPRESENTATIVES

APRIL 10, 2008

Good morning Mr. Chairman and distinguished members of the Committee. I am pleased to appear before you today to discuss how the Coast Guard conducts its Marine Investigations Program as well as the Department of Homeland Security (DHS) Office of Inspector General's (OIG) investigation findings on the Motor Vessel (M/V) COSCO BUSAN oil spill that occurred on November 7, 2007.

The United States Coast Guard has broad, multi-faceted jurisdictional authority and responsibilities to ensure the safety and security of the Marine Transportation System (MTS). The Coast Guard relies upon the information it develops through detailed investigations of various incidents in order prevent recurrences, improve marine safety, safeguard lives at sea and to protect the marine environment. We use the lessons-learned from investigations and oil spills, most recently the M/V COSCO BUSAN, to provide valuable input into standards development, compliance and enforcement, as well as education and outreach programs.

The Coast Guard uses several mechanisms to meet this review and investigation function. Following the M/V COSCO BUSAN incident, the Coast Guard initiated an interagency, collaborative review of the joint incident response. The second stage of that review continues and we are receiving excellent cooperation from state and local agencies, stakeholders, and industry representatives. The results of this review will inform federal, state and local planning and response efforts.

The Coast Guard also benefits from external reviews. The DHS OIG recently completed a 60 day review of the Cosco Busan Incident. The Coast Guard worked closely with the OIG to provide information required to facilitate a transparent review of the response to the incident. We provided similar assistance to the National Transportation Safety Board to assist with their independent investigation of the same incident.

The Coast Guard also conducts its own incident investigations to assess adequacy of current procedures, associated implementation, and the need for additional requirements to prevent future marine casualties. For example, at present, we are conducting a Marine Board of Investigation into the tragic loss of four lives and sinking of the fish processing vessel Alaska Ranger.

Each of these investigative mechanisms serves to improve the safety and security of the MTS. Rigorous self-scrutiny, third party review and thorough investigations are vital components our program.

EXECUTIVE SUMMARY OF THE COSCO BUSAN INCIDENT

On Wednesday, November 7, 2007 the Hong Kong flagged M/V COSCO BUSAN, a 900-foot container carrier, struck one of the towers of the San Francisco Bay Bridge. The ship suffered structural damage along a 100 foot section of the vessel's port side. The Coast Guard estimated it took less than one minute for approximately 53,000 gallons of medium grade fuel oil to spill into the San Francisco Bay. The conditions at the time of the incident included heavy fog with limited visibility to approximately 1/8 of a mile. The State of California, the vessel owner's representative, and the Coast Guard formed a Unified Command to coordinate response efforts. Joint actions resulted in the recovery of over 7,000 gallons of product on the first day and 22,836 gallons of product by the conclusion of the cleanup.

THE INCIDENT SPECIFIC PREPAREDNESS REVIEW (ISPR)

On November 14, 2007, the Coast Guard Chief of Staff chartered an ISPR to analyze the Unified Command response to the M/V COSCO BUSAN oil spill in San Francisco Bay. Chaired by Rear Admiral Carlton Moore, U.S. Coast Guard Reserve (retired), the ISPR team is comprised of senior representatives from the Pacific Merchant Shipping Association, the California Office of Spill Prevention & Response, the Pacific States/British Columbia Oil Spill Task Force, the City and County of San Francisco Department of Emergency Management, the National Oceanic & Atmospheric Administration Office of Response and Restoration, the California Coastkeeper Alliance and the San Francisco Baykeepers.

The ISPR Team is reviewing the San Francisco Bay Area Contingency Plan and the effectiveness of the Unified Command's response to the oil spill in accordance with its charter. The Team is not charged with addressing the cause of the incident or with recommending administrative, civil, or criminal penalties against any parties. The ISPR assessment is conducted in two stages: the first, already completed, covered the initial two weeks of the response and the second will cover the remainder of the response. The second report will be completed by May 7, 2008.

On January 11, 2008, the ISPR Team finalized their initial report, which addressed the first two weeks of the response. The report includes a detailed timeline of the incident and response, as well as data on the number of responders and volunteers involved, the amount of oil recovered, equipment deployed, and other figures relevant to the response effort. It includes approximately 110 lessons learned and 128 recommendations intended to improve preparedness and response in the San Francisco Bay response community. The recommendations fall into several broad categories such as Exercises and Drills, Area Contingency Planning, Training, Initial Actions and Unified Command. Examples of report observations include:

1. Poor visibility, language barriers, and the relatively low experience level of the first Coast Guard personnel to arrive on board the vessel contributed to a misunderstanding about the volume of oil spilled on the first day.
2. Through the efforts of the Unified Command and the vessel's contracted Oil Spill Response Organizations, responders recovered 7,140 gallons of oil by the end of the first day, and 19,466 gallons during the first two weeks.
3. It is vitally important that local governments, response organizations, non-government organizations, and other stakeholder groups be included in exercises, planning, and other preparedness activities. When incidents do occur, those same groups must be incorporated into the operation as described in the plan, and kept informed of response progress.

While the report is focused on the San Francisco Bay Area, many of the recommendations are applicable to other geographic areas. Accordingly, the Coast Guard distributed the initial ISPR Report to all Coast Guard Sectors. Our Federal On-Scene Coordinators are reviewing the findings with respective Area Committees in order to make appropriate updates to Area Contingency Plans. The Coast Guard is also implementing changes at the national level that incorporate some of the ISPR's observations and recommendations. The ISPR Team continues to review the response and will deliver a final report on May 7, 2008.

DHS OIG REPORT RECOMMENDATIONS

The Coast Guard worked closely with the Inspector General's staff to provide needed information to facilitate understanding of our prevention, preparedness, and response programs. The OIG's report makes recommendations that address vessel traffic services, marine casualty and pollution investigation, and command and control, including interagency collaboration, during response operations.

BACKGROUND ON THE COAST GUARD MARINE INVESTIGATIONS PROGRAM

The Coast Guard's Marine Investigations Program has been a vital arm of marine safety activities since the 1830s when the program's predecessor, the Steamboat Inspection Service, was established. In 1832 alone, approximately 14 percent of the steam vessels in operation were destroyed by explosion and over 1,000 people were killed. These explosions happened largely because there were no vessel inspection laws or rules of navigation. In some cases, mariner incompetence, negligence, and/or misconduct were contributing causes. The U.S. Congress reacted to these facts by establishing inspection laws and creating the Steamship Inspection Service. Subsequent revisions to the law created both the Vessel Inspection and Marine Investigations Programs, whose precepts are largely unchanged in today's Coast Guard: 1) to ensure that credentialed mariners are competent; 2) to ensure that the vessel safety laws are observed; and 3) to suggest where new laws or inspection rules are necessary to save lives.

The historical missions have evolved into the modern marine casualty investigations and personnel action segments of the Marine Investigations Program. Our investigation and law enforcement roles have grown to include detecting violations of all applicable federal laws and regulations, taking remedial law enforcement action such as civil penalties and suspension and revocation, investigating pollution, and ensuring compliance with international treaties such as the International Convention on Load Lines, 1966 (ICLL); the International Convention for the Safety of Life at Sea 1974 (SOLAS); the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW); and the International Convention for the Prevention of Pollution from Ships, 1973, as amended 1978 (MARPOL 73/78).

MARINE INVESTIGATIONS PROGRAM ACTIVITIES

The Marine Investigations Program accomplishes its mission through the investigation of casualties and follow-up activities designed to prevent casualties from reoccurring. Investigative activities are intended to uncover the causes of incidents, document the events and their causes, and initiate the necessary corrective actions. Investigations also detect and enforce federal law violations. The Office of Investigations and Casualty Analysis at Coast Guard Headquarters provides program guidance for all aspects of casualty investigations, including field investigations, training, outreach and follow up.

Marine investigations are generally conducted after the occurrence of incidents involving vessel casualties, such as groundings, collisions, and sinkings, and personnel injuries, or fatalities. Investigations are also conducted for vessel seaworthiness.

Investigations are conducted for:

- vessel casualties or accidents;
- violations of statutes the Coast Guard is authorized to enforce;
- incidents involving vessel personnel that may lead to suspension and revocation proceedings or assessment of civil or criminal penalties;
- boating accidents;
- waterfront facility casualties and incidents;
- deepwater port casualties and incidents;
- marine pollution incidents;
- accidents involving aids to navigation; and
- accidents involving installations and other devices on the outer continental shelf.

The Coast Guard conducts over 9,000 casualty and pollution investigations annually, both to assess responsibility and to develop a better understanding of safety issues. These investigations include a focus on the "human element" based on the premise that 80 percent of casualties are caused by human factors.

All incidents reported to the Coast Guard, regardless of source, are investigated; however, the Sector Commander under their Officer in Charge of Marine Inspection (OCMI) authority must determine on a case-by-case basis what investigative actions are appropriate for a specific case based on factors such as the likely value to marine safety and risks in a given port.

Depending on the nature and circumstances of a marine casualty, the Coast Guard will conduct either an informal or formal investigation as appropriate. The Coast Guard may establish a Marine Board of Investigation consisting of both Coast Guard officers and investigators from the National Transportation Safety Board (NTSB). Recently, pursuant to the authority established in 46 USC 6301, the Commandant ordered the establishment of a Marine Board of Investigation concerning the sinking of the Fishing Vessel (F/V) ALASKA RANGER in the Bering Sea on March 23, 2008. Of the 47 people on board the Alaska Ranger, 42 survived the incident. The Board will thoroughly investigate this tragic loss covering all aspects of the vessel's operations and condition, review any Coast Guard examination/inspection records and activities, and also review the Coast Guard's search and rescue operations. Upon completion of its investigation, the Board will report their findings and recommendations to the Commandant.

MARINE INVESTIGATIONS TRAINING AND QUALIFICATIONS

The role of a Marine Casualty Investigating Officer is to thoroughly investigate the cause of a marine casualty through the collection of data. These data are then analyzed to identify causal factors and human error. Safety recommendations are issued and implemented that address those factors in order to prevent similar casualties from occurring in the future. The Coast Guard initiates administrative, civil and criminal procedures against those responsible when appropriate.

The Coast Guard announced its new suite of Investigating Officer qualifications (Marine Casualty Investigator, Maritime Enforcement Investigator, Suspension and Revocation Investigator, Suspension and Revocation Hearing Investigator, and Pollution Investigator) in August 2007. These qualifications

are supported by several training courses held at Coast Guard Training Center Yorktown, Performance Qualification Standards (PQS) and on-the-job training that must be completed to obtain these qualifications.

The current suite of qualifications and training courses are the result of a comprehensive Sector Performance Analysis project initiated in 2004. The study aimed to determine the appropriate level of performance support for the newly created Sectors with the primary focus on improving and updating marine safety personnel training and qualifications. As a result, the Marine Investigations training program updated resident training course curricula, promulgated new job aids to support training and on-the-job performance, and revised PQS workbooks for all job specialties in the Investigations Program, including Marine Casualty Investigator, Marine Enforcement Investigator, Suspension and Revocation Hearing Investigator and Suspension and Revocation Investigator.

The Marine Safety Program's Merchant Marine Industry Training (MMIT) program has typically provided one position per year to the Marine Investigations Program. The active duty individual selected for this program works with a particular segment of the marine industry for four to six months to learn how that segment operates, and to become better aware of the challenges faced by the industry, noting unique business methods and observing the effect of regulation upon their operations. An additional benefit of the program is that it opens lines of communication between industry and the Coast Guard. This year the Marine Investigations Program will send two personnel to industry training.

In order to bolster investigator expertise, additional Investigating Officer training opportunities have been introduced. One significant example is the establishment of an Investigating Officer Professional Development Program at the U.S. Merchant Marine Academy. This program provides Coast Guard Investigating Officers with a better understanding of the marine transportation system including current characteristics of the maritime industry, current trends and influences on maritime safety, Master/Pilot relationships, marine insurance, bridge resource management, shipboard electronics including radar and Automatic Radar Plotting Aids, vessel operations and systems (both deck and engine), and vessel hydrodynamics.

Coast Guard Investigating Officers may also attend the National Association of State Boating Law Administrators boating accident investigator seminars. These seminars provide Investigating Officers with an opportunity to expand their professional investigator skill sets.

PROFESSIONALISM

The Coast Guard's Office of Investigations and Casualty Analysis is a recognized authority in marine investigations policy. In addition to using lessons learned from casualty investigations to inform regulations and Coast Guard policy, we use this information at the field level to reach out to and educate the public at both the regional and national levels. These outreach activities include participation in public meetings (e.g. Harbor Safety Committees, Area Committees), various national partnerships (e.g. the National Association of State Boating Law Administrators, Towing Safety Advisory Committee, Boating Safety Advisory Committee, Commercial Fishing Vessel Safety Advisory Committee) and other forums.

The Coast Guard's expertise in marine investigations is also recognized by the International Maritime Organization (IMO). The Coast Guard Office of Investigations and Casualty Analysis is an active member of the IMO Subcommittee on Flag State Implementation and chairs the subcommittee's Marine Casualty Investigations and Analysis working group. The main focus of this subcommittee is to identify the problems countries are experiencing in properly carrying out their convention responsibilities and to develop guidance to assist them in solving those problems.

The Office of Investigations and Casualty Analysis currently chairs the Marine Accident Investigators' International Forum (MAIIF). MAIIF is an international non-profit organization dedicated to the advancement of maritime safety and the prevention of marine pollution through the exchange of ideas, experiences and information acquired in marine accident investigation, and to foster cooperation and communication between marine accident investigators across the globe.

FEEDBACK AND PREVENTION

The Coast Guard's Office of Investigations and Casualty Analysis gathers and analyzes information from many sources (Coast Guard marine safety professionals, the marine industry, open source publications, etc.) to provide trend analysis, track leading and lagging indicators, conduct formal studies and generate reports. These outputs allow Coast Guard decision makers to determine where to best focus attention and resources with regard to marine safety. This information is used for process improvement, to take corrective actions and to increase awareness both internal and external to the Coast Guard.

Process improvements may come in the form of Safety Recommendations, which are generally used to create or inform policy, processes, laws and/or regulations; and Safety Alerts which are used to quickly advise the public of conditions that, if left unaddressed, pose urgent threats to safety in fleets of vessels or particular types of operations and to propose voluntary actions for elimination or mitigation of those threats. Safety Advisories are also used, to address ways to improve marine safety focusing on specific vessel operations, practices, topics or other areas without the same level of urgency as Safety Alerts.

The Coast Guard's Office of Investigations and Casualty Analysis regularly uses its internally developed Safety Alert Distribution System to share "lessons learned" from marine casualties to its global maritime audience. When important safety or inspection considerations are discovered during the course of a casualty investigation, these considerations can be distributed within days after the initial inquiry to maritime personnel in private and governmental organizations worldwide. These alerts, emailed to more than 2,500 addressees, are frequently retransmitted through other printed and electronic media outlets and distribution systems, furthering their dissemination.

WAY FORWARD

The Coast Guard has developed a strategy that provides a vision and multi-year roadmap for improving the effectiveness, consistency, and responsiveness of the Coast Guard Marine Safety program to promote safe, secure, and environmentally sound maritime commerce. The Coast Guard will reinvigorate industry partnerships, improve mariner credentialing services, bolster inspector and investigator capacity, improve technical competencies, and expand rulemaking capability to ensure that we meet current and future industry needs. The 2009 Request includes \$22.6 million in new resources. Budgeted resources will be directed to:

Improve the Coast Guard's Marine Safety Capacity and Performance

- Increase marine inspector and investigator capacity.
- Strengthen marine inspection and investigation consistency through addition of civilian positions.
- Increase accessions from U.S. Merchant Marine Academy and maritime institutions.
- Strengthen Marine Safety career paths.
- Expand professional Marine Safety training and education.
- Expand opportunities for maritime industry training.
- Enhance engineering capacity for plan review, policy, and standards development.

Enhance Service Delivery to Mariners and Industry Customers

- Establish Centers of Expertise.
- Improve information technology systems.
- Increase rulemaking capacity to meet regulatory implementation.
- Improve credentialing through greater efficiency, transparency and capacity.

The Coast Guard anticipates the addition of military and civilian Investigating Officer billets will create a regimented career path for Investigating Officers that will support the development of competent and experienced Investigating Officers capable of consistently conducting complete and accurate marine casualty investigations. The additions will help field units process an ever increasing investigative workload while improving the consistency, accuracy, timeliness and completeness of marine casualty investigations. Improving the quality of marine casualty investigations will in turn enable the Coast Guard and the industry to better analyze casualty trends and identify areas of maritime operations where action is needed to improve safety.

We have previously announced that the Coast Guard will establish Centers of Expertise to provide venues for professional development and exchange between industry and Coast Guard personnel. Our plans include the establishment of two investigation-related Centers of Expertise (i.e., marine casualty investigations, and suspension and revocation) which are a vital step in the process to improve the Marine Investigations Program and related Suspension and Revocation Program. The Centers of Expertise will increase the overall quality of Coast Guard marine casualty investigations and suspension and revocation proceedings, lead to a more efficient and higher quality service to the public, and increase the overall quality of maritime safety and security.

Another vital step in the process to improve the Marine Investigation Program and related Suspension and Revocation Program is to improve the Marine Information for Safety and Law Enforcement (MISLE) system. MISLE is the Coast Guard central database where marine safety activity information is stored. We anticipate that updates to the MISLE system and a new mobile application will increase the amount and accuracy of the information our investigators are able to document in the MISLE system and increase the speed with which that information makes it into the feedback loop available to field commands and other stakeholders within the Coast Guard.

We also anticipate improving the use of MISLE by Investigating Officers in the suspension and revocation process. We envision MISLE being used to generate and file all Coast Guard suspension and revocation documents. This will standardize the process for the creation of Coast Guard suspension and revocation filings, improve the service of filings with mariners, and foster a nationally consistent Coast Guard suspension and revocation policy and process.

CONCLUSION

Preventing marine casualties is a shared goal between the Coast Guard and maritime industry. Marine casualties cause delays to the Marine Transportation System, adversely impact the flow of domestic and international commerce, and impose additional financial burdens on the maritime industry and their customers. Marine casualties also threaten the lives of mariners and citizens alike and often result in damage to the environment. More often than not, marine casualties can be prevented if the causal factors can be identified, understood and properly addressed.

We have the opportunity to prevent many marine casualties from occurring and mitigate the consequences of those that do occur. We can achieve these goals with an adequate corps of well trained and experienced investigating officers who have the necessary tools and resources, including an efficient and comprehensive data system, to accomplish their job.

During his State of the Coast Guard address, the Commandant emphasized the Coast Guard's longstanding commitment to honoring and serving professional mariners. Our plan to enhance the Coast Guard's marine safety program, including our Marine Investigations Program, is a hallmark of this commitment.

Thank you for the opportunity to testify before you today. I will be happy to answer any questions you may have.